

From: [Bradford, Anna](#)
To: [shutenergy](#)
Subject: RE: Small Modular Reactor (MSRs)
Date: Wednesday, February 12, 2014 2:53:15 PM

Mr. Hansen,

Thank you for your e-mail. As you note, your proposed reactor appears to be a production and utilization facility, which requires a license under Section 103 of the Atomic Energy Act (AEA). A Section 103 license is required for any production and utilization facility, U-233 is considered special nuclear material as defined in Section 11 of the AEA, and utilization facilities are, in part, defined as facilities that utilize special nuclear material. Any changes to the definitions in the AEA would require Congressional action; the NRC does not have the authority to make changes to its implementing statute independently.

I hope this is helpful. Best regards,

Anna Bradford, Chief
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U.S. Nuclear Regulatory Commission
301-415-1560

From: shutenergy [mailto:shutenergy@gmail.com]
Sent: Thursday, January 30, 2014 8:23 AM
To: Bradford, Anna
Subject: Small Modular Reactor (MSRs)

Dear Anna Bradford,

Thanks for your past reply on some questions I have on the development in general of Small Modular Reactors and more so our own concept reactor known as the RTMSR Reactor which is a Molten Salt Reactor that will use U-232 & U-233 as the reactor fuel. The more I read the 1954 Atomic Energy Act I still wonder why in my opinion the Molten Salt Reactors were tagged along side the (LWRs) and (PWRs) when Molten Salt Reactors do not impose a National Security Risk and should not have been in the act. Cannot we have the Molten Salt Reactors stripped out of the 1954 Atomic Energy Act and still follow development lines for reactor design and application approval but under what I call the "FAST TRACK MODULAR REACTOR ACT" of 2014.

In my emails I have sent to the NRC in the past I still have great concerns that we will without question fall behind in the Small Modular Reactor Development goals that other countries are undertaking to build these very small reactors and we could get bogged down with overwhelming regulations that could stall our reactor development plans because of an old and very outdated 1954 regulation that could well take us right out of the Global Climate Platform for development of the MSRs coming from the United States.

Can modular reactors like the RTMSR Reactor be built safely and the answer is yes and they can supersede the past with up to date metal alloys and graphite composite materials which in 1944 through 1972 just where not around and now they are. I would like your feedback on a request of mine to have the Molten Salt Reactor efforts in the United States fall under a new enactment like a few Senate Bills I seen that wanted to do this and they failed passage not because of the contents of the Bill it is what I think a lack of education on MSRs that caused the Bills to fail and me personally I think we all need to look at the MSRs regulations in whole new light.

I do not want to offend anybody not the NRC or other agencies in anyway that would cause bad feelings to be produced but these Molten Salt Modular Reactors will be manufactured 75% faster than the United States by other Nations if we fail to get very aggressive about our development plans on such reactors as the RTMSR Reactor and others that are the small filler reactors. I will be sending a letter to President Obama asking him to help your agency to please overhaul the 1954 Atomic Energy Act and peel these MSRs out of the old Bill and why I feel the way I do about this development issue.

I'm the last person that would ever try and sidestep regulations for the health safety and welfare of our own people for I'm wired as absolute and if you have been around somebody like me we follow the rules or not at all. We all know that yes U-233 is an issue and that is something I think your agency could handle very well if you take outside support and suggestions for I have made it very clear to our Universities here that this is not just my reactor this reactor belongs to all of us and everybody should benefit from the very simple design and more so my own country the United States. We must have rules and regulations without question and I know this but if those rules effect the Development of U.S. Commerce we have some serious developmental rights that we must have a hard look at even when they fall under the wording "Nuclear".

If MSRs where a National Security issue that fact would have been well known and history has shown that ORNL and the DOE know that MSRs are not even in the same ballpark as the LWRs and that is why I need to know where the NRC is at on what I call developmental regulation softening which that is where these MSR reactors fall under which again is under the "Development Commerce Act" and more so because these reactors are not like the Fukushima LWR design they cannot Melt Down they shut down.

Please have a open ear to what I seek Anna for its not just the fact of the development issue its the fact these MSRs are a safer choice of reactors development wise 85% safer. I would like to visit your office in person with a few other Professors that will come with me and see if we can open a dialog and begin to clear the air up about MSRs and LWRs which as you know as a Professor yourself MSRs and LWRs are just the opposite reactors. I look forward to your reply. The Best.

SHansen

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